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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/918,129	07/30/2001	Robert Morelos-Zaragoza	7217/64965	1398

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COOPER & DUNHAM LLP  
1185 Avenue of the Americas  
New York, NY 10036

EXAMINER
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MUNOZ, GUILLERMO

ART UNIT	PAPER NUMBER
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2637

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

4K

<b>Office Action Summary</b>	<b>Application No.</b> 09/918,129	<b>Applicant(s)</b> MORELOS-ZARAGOZA ET AL.	
	<b>Examiner</b> Guillermo Munoz	<b>Art Unit</b> 2637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 July 2001.
- 2a) ☐ This action is **FINAL**.
- 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3-5 and 11 is/are allowed.
- 6) ☒ Claim(s) 1-2, 6, 9, 10, and 12 is/are rejected.
- 7) ☒ Claim(s) 7 and 8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 July 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some \* c) ☒ None of:
    - 1. ☐ Certified copies of the priority documents have been received.
    - 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    - 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Priority***

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on 7/31/2000. It is noted, however, that applicant has not filed a certified copy of the P2000-231826 application as required by 35 U.S.C. 119(b).

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the limitation "block length selector for receiving the channel state information from the channel state estimator" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified

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and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

Claim 7 is objected to because of the following informalities:

Claim 7 is objected to because the phase “transmitter” in line 8, should be changed to — receiver—.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 recites the following limitation “the block length selector producing the schedule of block lengths based on the predictions” in lines 5-6. Claim 5 is dependent on claim 4 and inherits the following limitation “channel state estimator...for producing the channel state information accordingly” in claim 4, lines 2-5. Additionally, claim 5 being dependent upon claim 3 inherits the following limitation “selecting block lengths that are dependent on the channel state information” in line 6-7 of claim 3. It is unclear as to which information is used by the block length selector for producing the schedule of block lengths. Figure 1 appears to

suggest the block length selector uses the information provided by the channel state predictor for generating the block length schedule.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 6, 9, 10, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Proctor, Jr. in view of Rikkinen et al..

Regarding claim 1, Proctor, Jr. disclose a Coding For Forward Link which teach almost all the claimed subject matter "a transmitter...a block length selector...integral multiple relationship...schedule of block lengths...an encoder...an interface for transmitting" in claim 1 as follows. Proctor, Jr. teach a system wherein varying FEC rates may be assigned to each user channel based on channel conditions, note Col.2 lines 18-20. Proctor, Jr. teach the paging channel sends control signals to the access unit to indicate the coding rate to be used in future transmissions over the forward link, note Col.2, lines 38-42. Proctor, Jr. teach a framing function that packages input payload data into conveniently sized groups referred to as frames, the size of the pre-encoded frames will vary depending on the FEC coding scheme selected, note Col.4, lines 39-45. The encoded frame size being fixed, note col.4, line 50. Proctor, Jr. teach measuring the quality of the link can be made at the access unit and feed back to the base station

on a reverse link, note Col.6, lines 54-60. However, Proctor, Jr. does not expressly state that the varying frame sizes share an integral multiple relationship.

Rikken et al. teach a method for Radio Resource Control which disclose the division of frame resources into slots which represent the smallest resource unit to be allocated from a frame, note Col.3, lines 27-30. Rikken et al. further disclose that one slot is always allocated as a whole, thereby, having an integral relationship, note Col.3, lines 34-35.

Therefore, it would have been obvious to one having ordinary skill in the art to implement the construct Proctor's varying sized pre-coded frames with Rikken et al.'s slots representing the smallest available resource, since Rikken et al. suggest in Col.2, lines 43-47, that the result of this modification would allow the base station to divide the available radio resources in a flexible and dynamic way.

Regarding claim 2, Proctor, Jr. further disclose the claimed information, note the output of element 42 in Fig. 3.

Regarding claim 6, as applied to claim 1 above, Proctor, Jr. further teach the claimed subject matter "a channel state estimator...receiver...a decoder...schedule of block lengths" in Fig. 2, note element 14-n and Col.6, lines 26-40.

Regarding claim 9, see claim 2.

Regarding claim 10, see claim 1.

Regarding claim 12, see claim 6.

***Allowable Subject Matter***

Claims 3-5 and 11 are considered allowable.

Claims 7 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Claims 3-5, 7-8, and 11 are considered allowable because the present invention comprises a receiver, which receives channel state information and uses the information to generate a schedule of block lengths. The receiver decodes blocks of data received over the communication channel using the generated schedule of block lengths. None of the references of record suggest or teach this combination of limitations. These distinct features have been included in independent claims 3, 11, and dependent claim 7, rendering them allowable. Claims 4-5 are dependent on claim 3 and thereby are considered allowable. Claims 7 and 8 are dependent upon rejected claim 6 and would be allowable if rewritten to overcome objection indicated above.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Guillermo Munoz whose telephone number is 571-272-3045. The examiner can normally be reached on Monday-Friday 8:30a.m-4:30p.m..


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on 571-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



GM  
October 28, 2004



**JEAN B. CORRIELUS**  
**PRIMARY EXAMINER**  
11-1-04